



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/713,569

11/13/2003

Gregory Alan Holmes

11867/24

8263

757 7590 10/31/2007
BRINKS HOFER GILSON & LIONE
P.O. BOX 10395
CHICAGO, IL 60610

EXAMINER

FELTON, MICHAEL J

ART UNIT

PAPER NUMBER

1791

MAIL DATE

DELIVERY MODE

10/31/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/713,569	Applicant(s) HOLMES, GREGORY ALAN	
	Examiner Michael J. Felton	Art Unit 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 August 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4,5,7,8,10,11 and 13-43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,5,7,8,10,11 and 13-43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Arguments

1. Applicant's arguments with respect to claims 1, 2, 4, 5, 7, 8, 10, 11, 13, 14, 17-20, and 25-43 have been considered but are moot in view of the new ground(s) of rejection.
2. The indicated allowability of claims 15, 16, and 21-24 are withdrawn in view of the newly discovered reference(s) to Application Number 10/793179, Houck et al. (US 4,600,027) and Schneider (US 5,979,459). Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 112

3. Claims 26, 28, 31, 33 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claims 26 and 31 contain only method steps and present no structural details concerning the apparatus described in claim 1

Double Patenting

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct

Art Unit: 1791

from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 1, 2, 4, 5, 7, 8, 10, 11, 13, 14, 16, 17, 19, 20, 25, 27, 29, 30, 32, 34, and 35 are provisionally rejected on the ground of nonstatutory double patenting over claims 1, 2, 4, 10, 11, and 15 of copending Application No. 10/793179. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

The subject matter claimed in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application since the referenced copending application and the instant application are claiming common subject matter, as follows:

6. Regarding claims 1, 4, 25, 27, 32, and 34, claim 1 of Application 10/793179 describes an apparatus comprising a means for supplying cigarette rods, means for rotating the cigarette assembly along its longitudinal axis comprising a roll drum and roll block, a means for applying a predetermined pattern of additive on a predefined region of the cigarette assembly, wherein the roll drum has a plurality of transverse grooves sized for supporting the cigarette with recesses aligned with the predetermined region.

7. Although 10/793179 does not disclose a transfer drum and a cooperating laser cam, these parts serve the same function as the roll drum and roll block of 10/793179. It would have been obvious to one of ordinary skill in the art at the time of invention to use a drum, whether a roll, transfer, or other drum, to receive the cigarette and a cooperating block, cam, or other device to cause the cigarette to roll on the drum.

In addition, the circumferential groove in the instant application on the transfer drum is identical to the "plurality of recesses" in claim 1 of the 10/793179 application.

8. Regarding claims 2, 5, 19, and 20, claims 2 and 4 of application 10/793179 describe a means for applying that comprises spray nozzle, a spray jet, or a brush.

9. Regarding claims 7, 8, 13, 14, 16, 17, and, 35 claims 10, 11, and 15 of application 10/793179 describe a method that supplying a cigarette assembly, rotating the assembly about its longitudinal axis in a controlled manner, applying a predetermined pattern of additive material using a application means that applies a band circumscribing the cigarette, and rotating the cigarette so that the predetermined region is over a recess. These limitations are substantially identical to the substance of instant claims.

10. Regarding claims 29 and 30, it would have been obvious from the claimed limitation in 10/793179, that to form a band around the cigarette, one would rotate the cigarette at least one complete rotation about its longitudinal axis.

11. Claims 15, and 21-24 are provisionally rejected on the ground of nonstatutory double patenting over claims 1, 2, 4, 10, 11, and 15 of copending Application No.

10/793179 in view of Houck et al. (US 4,600,027). This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

The subject matter claimed in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application since the referenced copending application and the instant application are claiming common subject matter, as follows:

12. Regarding claims 21 and 23 of Application 10/793179 describes an apparatus comprising a means for supplying cigarette rods (capable of supplying any rod-shaped material), means for rotating the cigarette assembly along its longitudinal axis in a controlled manner, a means for applying a predetermined pattern of additive on a predefined region of the cigarette assembly as the cigarette rod is rotated, but no laser perforation means is disclosed.

13. Houck et al. disclose a laser perforation means (figure 8), in which the "laser beam is focused to traverse the rotating cigarette...", indicating that cigarette is rotated while the laser is operating upon it. As such, it would have been obvious to one of ordinary skill in the art at the time of invention to use a laser perforation system concurrently with an application system because the cigarette is being rotated for both operations and combine two operations would cut processing time, reduce the number of drums needed for separate cigarette rotation steps, which would reduce capital cost and maintenance costs.

Art Unit: 1791

14. Regarding claims 22 and 24, the circumferential groove in the instant application on the transfer drum is identical to the "plurality of recesses" in claim 1 of the 10/793179 application.

15. Regarding claim 15, the method disclosed in claim 22 of 10/793179 describes supplying two formed cigarette rods and a double length filter element in between (commonly known as the two-up filter cigarette), rotating the cigarette about its longitudinal axis in a controlled manner, applying a first and second predetermined pattern of additive material as the cigarette assembly is rotated. However, laser perforation is not disclosed. However, the apparatus disclosed by Houck et al. would be obvious to use with the apparatus and method of 10/793179 (see rejection of claims 21 and 23 above), and therefore, the method of using a laser perforation system concurrently with an application means would have been obvious to one of ordinary skill in the art at the time of invention.

16. Regarding claim 18, laser perforation is disclosed by Houck et al. (see rejection of claim 15).

17. Claims 36-43 are provisionally rejected on the ground of nonstatutory double patenting over claims 1, 2, 4, 10, 11, and 15 of copending Application No. 10/793179, as applied to claims 7 and 10 above, in further view of Molins et al. (US 4,111,740), Schneider (US 5,979,459), and Houck et al. (US 4,600,027). This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

The subject matter claimed in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application since the referenced copending application and the instant application are claiming common subject matter, as follows:

18. Regarding claims 36, 37, 40, and 41 it would be obvious in view of Molins et al. to add additive in a controlled pulse (accomplished through a nozzle described by Molins et al.) and it is obvious to those in the art that additives preferably form films on the material they are being applied to.

19. Regarding claims 38, 39, 42, and 43 the wrapper porosity (as measured in CORESTA units) lacks criticality in the function of this method. One of ordinary skill would understand that using paper with almost any porosity would make the method functional, however, different porosities may be needed for the desired use of the end product. As such it would be obvious to one of ordinary skill in the art at the time of invention to use wrappers with typical porosities for the intended use of the cigarette being manufactured.

Claim Rejections - 35 USC § 102

20. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(f) he did not himself invent the subject matter sought to be patented.

Claims 1, 2, 4, 5, 7, 8, 10, 11, 13, 14, 16, 17, 19, 20, 25, 27, 30, 32, and 34 are rejected under 35 U.S.C. 102(f) because the applicant did not invent the claimed subject matter. A separate application (10/793179), from the same assignee with no common inventor claims similar subject matter. As indicated in the obvious type double patenting rejection above, the claims differ in terminology as to what the drum and roll blocking means are called, but there is no material difference in the invention (see drawings). Analysis of the prior art in both cases indicates that the same aspect of both inventions (the recess or groove under the predetermined area where an additive is applied) will form the crux of the invention. In addition, the drawings of the drum in both cases, figure 5 in 10/793179 and figure 3 in 10/713569 (11/13/2003), are identical showings of this inventive concept. The other drawings in the case also show surprising similarities.

21. Because both cases the claims in both cases are drawn to apparently identical inventions, yet there are no common inventors and the same assignee, the question of who invented the subject matter must be raised.

Claim Rejections - 35 USC § 103

22. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

23. Claims 1, 2, 4, 19, 20, 25-28, and 31-34, are rejected under 35 U.S.C. 103(a) as being unpatentable over Luke et al. (US 4,583,558) in view of Molins et al. (US 4,111,740).

Art Unit: 1791

24. Regarding claims 1 and 4, Luke et al. disclose a drum and cooperating block that consist of a means for supplying a formed cigarette components, a means for rotating the cigarette rod about its longitudinal axis in a controlled manner, and contains a means for applying a predetermined pattern. In Luke et al. the pattern is not an applied material, it is instead a burning process, and means for rotating the cigarette rod is disclosed as being capable of maintaining the rod in one location relative to the tipping machine.

25. Molins et al. disclose a cigarette rod processing system that uses an application means consisting of printing surfaces to apply an additive to predetermined locations (figures 1 and 2, element 14A). It would have been obvious to one of ordinary skill in the art at the time of invention to use the printing surfaces disclosed by Molins et al. in the apparatus of Luke et al. in place of the heating element. Replacing one form of marking (electrical heating) with another (applying an additive) would have been within the understanding and capabilities of one of ordinary skill and would have resulted in an effective application apparatus with the benefits of both inventions.

26. The means for rotating disclosed by Luke et al. is capable of rotating the cigarette about its longitudinal axis in one location relative to the tipping machine by halting the forward direction of the drum but continuing the rotation of the rollers (figure 2, element 8). The cigarette would continue to rotate about its axis.

27. Regarding claims 2, 4, 19, and 20, Molins et al. disclose an application means (figure 1, element 16) proximate to the roll block (element 18), composed of a nozzle (col. 2, 20-25), or a transfer pad (figure 9, element 66; col. 1, line 23-32).

28. Regarding claims 25 and 27, Luke et al. do not disclose a transfer drum and cooperating laser cam. However, Luke et al do disclose the use of a drum and a roll block, and it would have been obvious to one of ordinary skill in the art at the time of invention that these devices could have been called a transfer drum and laser cam.

29. Regarding claims 26 and 28, the invention of Luke et al. is capable of rotating a cigarette rod about its longitudinal axis for one full rotation.

30. Regarding claims 31 and 33, the invention of Luke et al., with the means for applying of Molins et al. is capable of applying a band that circumscribes the cigarette rod in a predetermined location (pattern).

31. Regarding claims 32 and 34, Luke et al. do not disclose a circumferential groove in the transfer drum, however, Mollins et al. show a circumferential groove in a transfer drum illustrated in figure 9. Molins et al indicate that the fingers (62A) help remove the groups of filter sections from the drum 61. It would have been obvious to one of ordinary skill in the art at the time of invention that the fingers of 62A would have been placed into circumferential groves in the drum. These groves are capable of being located under a predetermined region.

32. Claims 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Luke et al. (US 4,583,558), in view of Molins et al. (US 4,111,740) and Schneider (US 5,979,459).

33. Regarding claims 21 and 23, Luke et al. disclose a drum and cooperating block that consist of a means for supplying a formed cigarette components, a means for

rotating the cigarette rod about its longitudinal axis in a controlled manner, and contains a means for applying a predetermined pattern. In Luke et al. the pattern is not an applied material, it is instead a burning process, and there is no teaching of using lasers to perforate the rod materials.

34. Molins et al. disclose a cigarette rod processing system that uses an application means consisting of printing surfaces to apply an additive to predetermined locations (figures 1 and 2, element 14A). It would have been obvious to one of ordinary skill in the art at the time of invention to use the printing surfaces disclosed by Molins et al. in the apparatus of Luke et al. in place of the heating element. Replacing one form of marking (electrical heating) with another (applying an additive) would have been within the understanding and capabilities of one of ordinary skill and would have resulted in an effective application apparatus with the benefits of both inventions.

35. Neither Luke et al. nor Mollins et al. disclose incorporating laser perforation, however, it is well known in the art to perforate cigarette assemblies using lasers. For instance, Schneider indicates that, "The ventilation zone may be generated, for example, by perforation of the filter wrapper by laser beams but also in a number of other ways." It would have been obvious to one of ordinary skill in the art at the time of invention to combine the known technique of laser perforation with the invention described by Luke et al. and Molins et al. Accomplishing more than one operation at a time, such as perforating as well as applying material, would reduce the number of steps, saving processing time, reducing the number of transfers of cigarettes from drum

to drum, thereby reducing damage to the cigarettes and reducing maintenance costs for additional equipment.

36. Regarding claims 22 and 24, Luke et al. do not disclose a circumferential groove in the transfer drum, however, Mollins et al. show a circumferential groove in a transfer drum illustrated in figure 9. Molins et al indicate that the fingers (62A) help remove the groups of filter sections from the drum 61. It would have been obvious to one of ordinary skill in the art at the time of invention that the fingers of 62A would have been placed into circumferential grooves in the drum. These grooves are capable of being located under a predetermined region.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Felton whose telephone number is 571-272-4805. The examiner can normally be reached on Monday to Friday, 7:30 AM to 4:30 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven P. Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1791

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MJF


STEVEN P. GRIFFIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700